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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,260	09/10/2003	Francesco Viaro	22106-00042-US	4010

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EXAMINER

NGUYEN, JIMMY

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/658,260	Applicant(s) VIARO ET AL.	
	Examiner Jimmy Nguyen	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0904</u> . | 6) <input type="checkbox"/> Other: _____ |

Specification

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaines (US 5548279) in view of Bruchmann (US 6472878).

As to claim 1, Gaines disclose (fig 2) a device for the measurement of the current in a conductor, comprising:

means (16) for detecting a current,

means (interconnection lines between the components) for the transmission of a signal indicative of the current,

electronic (60) means for the control, acquisition and processing of such signal indicative of the current.

However, Gaines is silent on the connecting means for the feeding of the device and for the communication, wherein said device includes means for the partialised feeding of such means for detecting a current.

On the other hand, Bruchmann teaches (fig 1) the connecting (34) means for the feeding of the device and for the communication, wherein said device includes means for the partialised feeding of such means for detecting a current.

It would have been obvious to one having an ordinary skill in the art at the time of the invention was made to add the connection device of Bruchmann within the sensing system of Gaines for the purpose of connecting the external devices to the sensor.

As to claim 2, Gaines disclose (fig 2) a device according to claim 1, wherein means for detecting a current include an insulating support and at least one magnetic field sensor (16).

As to claim 3, Gaines disclose (fig 2) a device according to claim 1, wherein magnetic field sensor is a hall sensor (16).

As to claim 4, Gaines disclose (fig 2) a device according to claim 1, wherein said means for the partialised feeding are controlled by said electronic (60) means for the control, acquisition and processing of said signal indicative of the current.

As to claim 5, Gaines disclose (fig 2) a device according to claim 1, wherein means for the transmission of signal indicative of the current are linked to means of adaptation of signal.

As to claim 6, Gaines disclose (fig 2) a device according to claim 1, wherein means of adaptation of signal (output signal from the sensor 16) are connected to means of ADC (64).

As to claim 7, Bruchmann teaches (fig 1) a device according to claim 1, wherein connecting (34) means include feeding means and bi-directional communication.

As to claim 8, Gaines disclose (fig 2) a device according to claim 1, wherein feeding means are fed by a current transformer (18, 20) positioned on a conductor.

As to claim 9, Gaines disclose (fig 2) a device according to claim 8, wherein conductor is a conductor exposed to measurement.

As to claim 10, Gaines disclose (fig 2) a device according to claim 7, wherein feeding means are linked to an external feeding source.

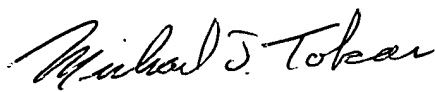
As to claim 11, Bruchmann teaches (fig 1) a device according to claim 1, one or more devices (42) being connected to a communication bus (all the cables or trace on the circuit board 30 which connected to the connector 34), in its turn connected to a protection device (column 4 lines 10) through an interface (connectors 34 and 56).

As to claims 12, 13, the combination of Bruchmann and Gaines disclose the operation of a circuit breaker with the sensor which is maintaining the feeding current during the first period and bringing the device in a stand by condition with feeding interrupting.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Nguyen at (703) 306-5858. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

JN.
Sep 1, 2004


Michael Tokar
Supervisory Patent Examiner
Technology Center 2800